



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

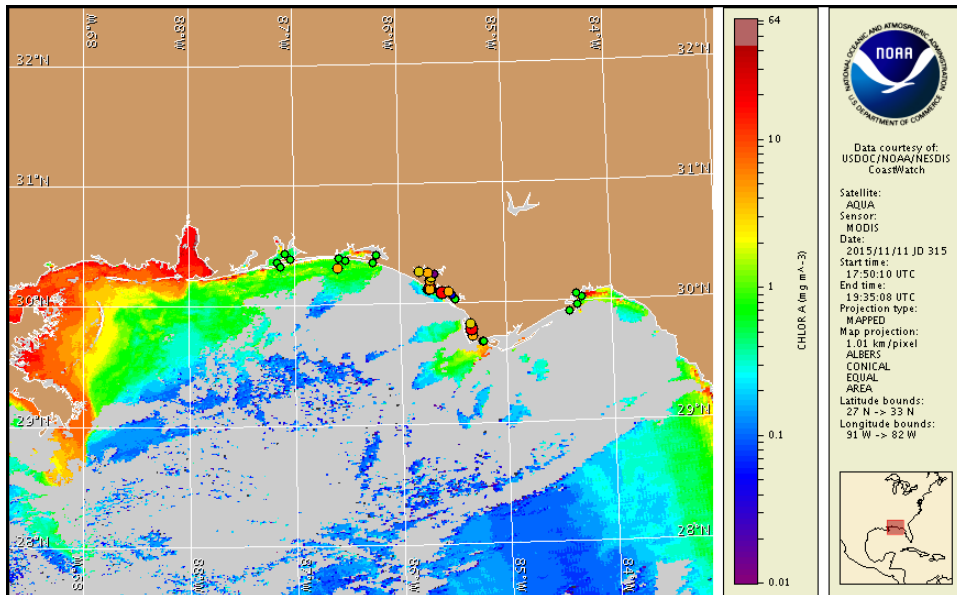
Thursday, 12 November 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, November 9, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from November 2 to 11: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information for Florida can be obtained through FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/redtidestatus>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

Not present to high concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of northwest Florida from Okaloosa to Gulf counties. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for along-shore northwest Florida Thursday, November 12 to Monday, November 16 is listed below:

County Region: Forecast (Duration)

Okaloosa County: Very Low (Th-M)

Walton County: Moderate (Th), Very Low (F-M)

Bay County: Moderate (Th), Very Low (F-M)

Bay County, bay regions: High (Th-M)

Gulf County: Moderate (Th), Very Low (F-M)

Gulf County, west bay regions-St. Joseph Bay area: High (Th-M)

All Other NWFL County Regions: None expected (Th-M)

SWFL County Regions: Visit <http://tidesandcurrents.noaa.gov/hab/#swfl>

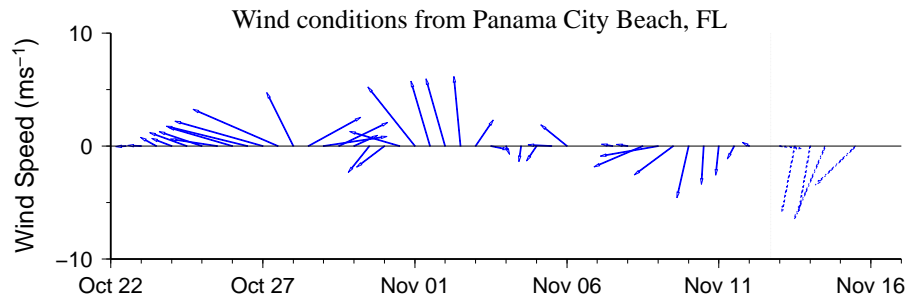
Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html. Reports of respiratory irritation and dead fish were received from Bay and Gulf counties.

Analysis

Recent samples collected over the past several days alongshore northwest Florida continue to identify background to 'high' *Karenia brevis* concentrations alongshore Walton to Bay counties, with the highest concentrations identified in St. Andrews Bay of Bay County (FWRI; 11/6-11/9). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>. Reports of respiratory irritation and dead fish were received from alongshore Panama City Beach in Bay County and Port St. Joe in Gulf County (FWRI; 11/9). Recent satellite imagery (MODIS Aqua, 11/11) is mostly obscured by clouds in northwest Florida from Bay to Gulf County, limiting analysis. Patches of elevated chlorophyll (2 to 7 $\mu\text{g/L}$) with the optical characteristics of *K. brevis* are visible alongshore northwest Florida from Escambia to Okaloosa.

Winds forecast Thursday night through Sunday night may promote the westward transport of *K. brevis* concentrations in northwest Florida.

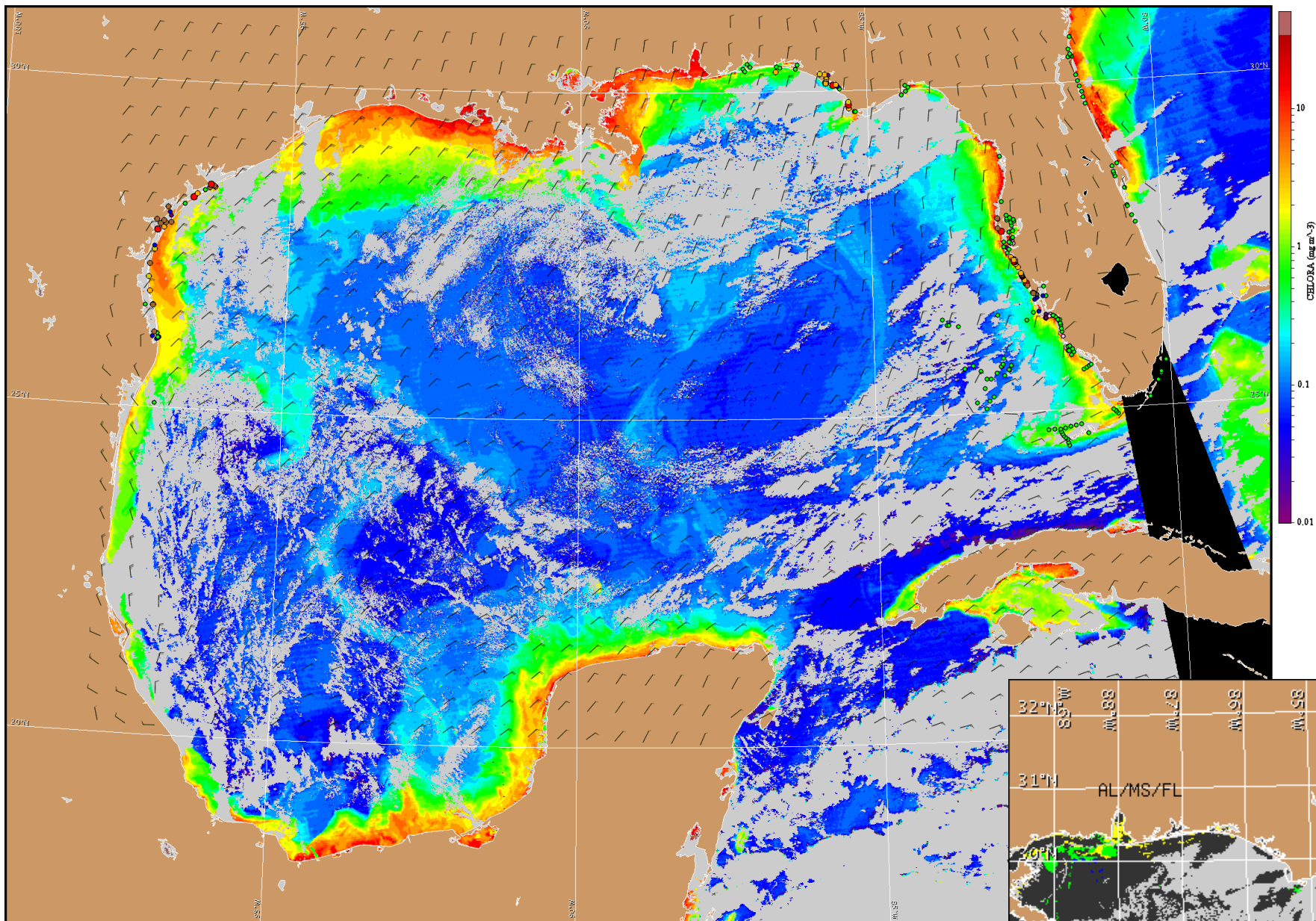
Yang, Davis



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

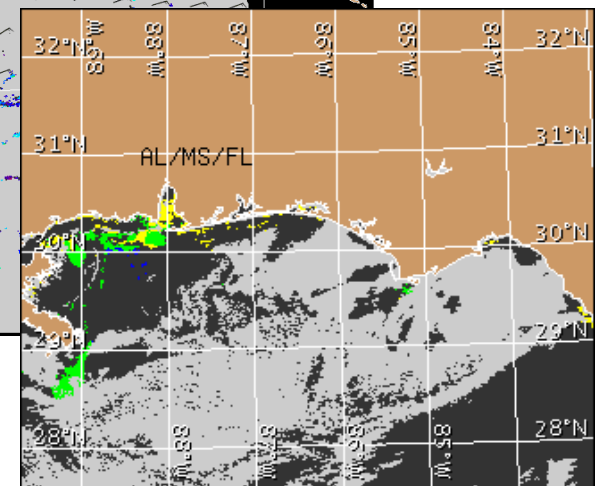
Wind Analysis

Escambia to Taylor counties: West winds (10kn, 5m/s) Thursday. North to Northeast winds (15-25kn, 8-13m/s) Thursday night through Saturday. East winds (20kn, 10m/s) Saturday night through Sunday night. Southeast winds (15-20kn, 8-10m/s) Monday.



Satellite chlorophyll image and forecast winds for November 13, 2015 12Z with points representing cell concentration sampling data from November 2 to 11: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).